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AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings include changes to Figures 3B and 4. These sheets, which include Figure 3B and Figure 4, replace the original sheets including Figure 3B' and Figure 4. In Figure 3B, Applicants amend the label of component 235 to read "Vertical gust1" rather than "Vertical gust." In Figure 4, Applicants add reference numerals to the steps in the flowchart.

Attachment: Replacement sheets

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REMARKS

Claims 1-55 were presented for examination. Upon entry of this paper, claims 1, 3, 5, 24, 33, 37, and 44 have been amended to improve form and readability of the claims. Claims 48-51 have been amended to recite a computer-readable medium holding instructions, as pointed out by the Examiner. Claim 53 has been amended to recite "the system" to address the Examiner's objection. No new matter has been added. The drawings and the specification have been amended to address issues raised by the Examiner. Applicants contend that amended claims are patentable and in condition for allowance as discussed below. Applicants respectfully request reconsideration of the outstanding objections and rejections in view of the comments set forth below.

I. Objections to the Specification

The Examiner states that the disclosure is objected to because of the following informalities: "on page 16, lines 11-12, "block 231" and "Vertical gust1" are believed to be typographical errors," (Office Action, p. 2, § 2).

Applicants amend the specification at page 16, line 11 to recite "block 232" rather than "block 231." Applicants amend FIG. 3B to include the label "Vertical gust1" for reference item 235.

As such, Applicants respectfully request that the Examiner to reconsider and withdraw the objection to the specification.

II. Objections to the Claims

The Examiner states that claim 53 is objected to because of the following informalities: "claim 53 recites "the method of claim 52," but claim 52 is directed to a system," (Office Action, p. 2, § 3).

Applicants amend claim 53 to recite "the system of claim 52" rather than "the method of claim 52."

Applicants respectfully request that the Examiner to reconsider and withdraw the objection to claim 53.

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III. Claim Rejections under 35 U.S.C. § 101

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Claims 48-51 are rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter. The Examiner states, "claims 48-51 are directed to a medium holding computer-executable instructions. Since the medium is not claimed as a computer-readable medium holding instructions that, when executed by a computer, allow the steps described in the claims to be performed, it may reasonably be interpreted as covering non-statutory matter," (Office Action, p. 2, § 5).

Applicants amend claims 48, 50 and 51 to be directed to a computer readable medium to address the issue raised by the Examiner. Applicants have also amended claims 48, 50 and 51 to remove the reference to a "method" and to recite "instructions" rather than "method steps."

Applicants respectfully request that the Examiner to reconsider and withdraw the rejection of claims 48-51 under 35 U.S.C. § 101.

IV. Claim Rejections under 35 U.S.C. § 102(e)

Claims 1-34, 37-45 and 48-55 are rejected under 35 U.S.C. § 102(e) as being anticipated by Singh (U.S. Patent 6,868,526), hereinafter "Singh," (Office Action, p. 3, § 7). Applicants respectfully traverse this rejection. For purposes of clarity, the separate claim sets involved in the rejection will be discussed separately below.

Claim 1

Claim 1 recites, among other limitations, "displaying to a user a plurality of transformation operations to be performed on the selected graphical object for creating a second graphical object derived from the selected graphical object." Singh does not disclose this feature.

Singh discloses a graphical subclassing mechanism for use in development of the graphical block diagram models. (Abstract). The graphical subclassing mechanism applies to blocks selected from libraries. Each library corresponds to different groupings or categories of blocks, (Col. 4, lines 17-19). For example, Fig. 2B of Singh shows blocks in the "sources"

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library. A user may select one of the blocks in the libraries to build a graphical block diagram using the model editor. (Col. 4, lines 34-37).

Singh discusses a process of graphical subclassing that is initiated with the selection by a user of a subsystem block corresponding to a graphical class defined in the library, (Col. 4, lines 66-67). The process enables the user to make changes to a value of one or more parameters of a block within the graphical class instance, (Col. 5, lines 3-5). The process applies the subclass data to the graphical class instance to produce a graphical subclass instance. (Col. 5, lines 14-20).

Singh walks through an example where a "repeating sequence" block is selected from a library. (Fig. 5A). The repeating sequence block is a subsystem block, and the associated subsystem is shown in Fig. 5B. Fig. 5C shows the repeating sequence block integrated into a block diagram model. The parameter dialog box associated with the constant block in the system (see Fig. 5F) is summoned and used to modify the constant value of the constant block (see Fig. 5G), resulting in a subclass that differs from the parent class.

Singh does not disclose displaying to a user a plurality of transformation operations to be performed on the selected graphical object for creating a second graphical object derived from the selected graphical object, as required by claim 1. The Examiner identifies Figs. 2A and 2B as disclosing this feature. (Office Action, p. 3, § 7). Applicants respectfully disagree. Fig. 2A shows a number of Simulink® libraries and Fig. 2B shows blocks available in the "sources" library. No transformation operations are shown in Figs. 2A and 2B in Singh.

The aforementioned libraries and blocks, referenced by the Examiner in the Singh reference, are not examples of transformation operations. A library or block is not synonymous with a transformation operation. Applicants' specification at p. 17, line 33- p. 18, line 6 states: "Examples of different types of transformation operations include, but are not limited to: 1) a traditional copy operation... 2) a "duplicate" operation... 3) a "copy and morph" operation... 4) a straight "morph" operation." As an example, Applicants illustrate a display of a plurality of transformation operations in Fig. 6A and related text of the specification at p. 19, line 22 *et seq.* Fig. 6A illustrates context menu 520 which displays "copy" and "duplicate" transformation operations that may be performed on inport block 532. Applicants respectfully draw the Examiner's attention to the difference between the transformation operations displayed in Fig.

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6A of the present application and the libraries/blocks displayed in Fig. 2A and 2B of the Singh reference. Applicants thus contend that the aforementioned libraries and blocks in Fig. 2A and 2B of Singh are not a display of transformation operations as recited by claim 1.

As such, Singh does not anticipate claim 1. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 1 under 35 U.S.C. § 102(e).

Claims 2-23

Claims 2-23 depend from claim 1 and, as such, incorporate each and every element of claim 1. Claims 2-23 are therefore allowable for at least the reasons presented above with respect to claim 1. Applicants respectfully request the withdrawal of the rejections and the allowance of claims 2-23. Additional patentable features of claims 2, 4, 13, 15, 20, and 21 are discussed below.

Applicants respectfully note that claim 2 recites additional patentable features. Claim 2 recites "the plurality of transformation operations are displayed in one of a context menu, a toolbar and a roll-up menu." The Examiner identifies Fig. 5D and related text of Singh as disclosing this feature, (Office Action, p. 3, § 7). Fig. 5D of Singh illustrates a top-level instance parameter dialog box for a user-selected block. The user enters values in parameter fields of the dialog box to set or override a default setting for respective parameter values of the selected block. (Singh, Col. 6, lines 22-24). Values of parameter fields of the block are different from operations. Singh does not disclose displaying a plurality of transformation operations in one of a context menu, a toolbar and a roll-up menu.

Applicants respectfully submit that claim 4 recites additional patentable features. Applicants note that claim 4 recites that the plurality of transformation operations include "a copy operation," and "a copy and morph operation for creating a second graphical object having one or more properties that is different from the properties of the selected graphical object." The Examiner asserts that Singh discloses the "copy operation" feature of claim 4 at Fig. 5E. (Office Action, p. 4, ¶ 1). Applicants respectfully disagree. Fig. 5E of Singh illustrates a context menu for a subsystem block. By selecting the "look under mask" menu option, the user is able to see the contents of the selected subsystem block. (Singh, Col. 6, lines 27-37).

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In contrast to the "look under mask" menu option of Singh, the "copy operation" recited in claim 4 is a transformation operation. That is, Applicants' specification at p.17, line 4 – p.18, line 1 reads: "1) a traditional copy operation, where second graphical object inherits all the properties of first graphical object and is independent of the first graphical object." Clearly, Fig. 5E and related text in the Singh reference fail to disclose a "copy operation" as required by claim 4 and as described in Applicants' specification.

The Examiner also asserts that Singh discloses the "copy and morph operation" feature of claim 4 in Fig. 3. (Office Action, p. 4, ¶ 1). Applicants respectfully disagree. Fig. 3 of Singh illustrates a subclassing process. The process enables the user to make changes to a value of one or more parameters. (Singh, Col. 5, lines 3-5). In contrast, in a "copy and morph operation" claim 4 requires the creation of a second graphical object having one or more properties that is different from the properties of the selected graphical object. Fig. 3 and related text in the Singh reference fail to disclose a "copy and morph operation" as required by claim 4.

Applicants respectfully submit that claim 13 recites additional patentable features. Claim 13 recites "the transformed graphical object is a signal tap block for tapping a signal from the selected graphical object." The Examiner identifies Fig. 5C and related text as disclosing this feature. (Office Action, p. 6, ¶ 1). However, Fig. 5C of Singh illustrates a screen display of a model window showing the placement of the selected block within the user's model. (Singh, Col. 6, lines 2-5). Singh discusses selecting a block in the library browser, dragging the block from the library browser and dropping the block in the model window. (Singh, Col. 5, lines 65 – Col. 6, line 1). A block dragged from the library browser to the model window is not a transformed graphical object. Singh does not disclose transformed graphical objects. Moreover, Singh does not disclose that a "transformed graphical object is a signal tap block for tapping a signal from the selected graphical object," as required by claim 13.

Applicants respectfully submit that claim 15 recites additionally patentable features. Claim 15 recites "the selected graphical object is a line representing the signal." Singh does not disclose selecting a line representing the signal. Singh discusses copying a block from the library window to the model window by clicking on the library node in the library browser to display the blocks on that library, selecting the block, dragging the block from the library browser and dropping the block in the model window. (Singh, Col. 5, line 63 – Col. 6, line 2).

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Singh does not disclose that the selected graphical object is a line representing the signal, as required by claim 15. Singh does not discuss lines or signals at all with regard to graphical subclassing.

Applicants respectfully submit that claim 20 recites additionally patentable features. Applicants note that claim 20 recites "the transformed graphical object is a copy of the selected graphical object." The Examiner asserts that Fig. 5E and related text of Singh discloses this feature. (Office Action, p. 7, ¶ 2). Fig. 5E of Singh illustrates a user identifying a subsystem block for modification. Singh discusses that a user may customize a model by identifying a subsystem block and a block within the subsystem block for further modification. (Singh, Col. 6, lines 27-30). Fig. 5E merely illustrates an example where the user opens the contents of the selected block. Singh does not disclose that "the transformed graphical object is a copy of the selected graphical object," as required by claim 20.

Applicants respectfully submit that claim 21 recites additionally patentable features. Claim 21 recites "the transformed graphical object has implicit links to the selected graphical object." The Examiner asserts that Fig. 5E and related text of Singh discloses this feature. (Office Action, p. 7, ¶ 3). As argued above regarding claim 20, Fig. 5E of Singh illustrates the user opening the contents of a subsystem block. There is no transformed graphical object in Fig. 5E of Singh. Singh does not disclose the transformed graphical object having implicit links to the selected graphical object.

In view of the above comments, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 2-23 under 35 U.S.C. § 102(e).

<u>Claim 24</u>

Claim 24 recites "executing a copy and morph operation on the first graphical object to create a second graphical object derived from the first graphical object, wherein the second graphical object automatically has one or more properties that are different than the first graphical object." Singh does not disclose this feature.

The Examiner identified Figs. 2A, 2B, 3 and related text of Singh as disclosing the features of claim 24. (Office Action, p. 8, lines 7-8). Fig. 2A shows a number of Simulink®

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libraries and Fig. 2B shows blocks available in the "sources" library. Fig. 3 illustrates a subclassing process, in which a model editor allows a user to make changes to an instance of a graphical class. (Singh, Col. 4, lines 37-41). Applicants contend that Fig. 3 and related text in Singh fail to disclose "executing a copy and morph operation on the first graphical object to create a second graphical object derived from the first graphical object, wherein the second graphical object automatically has one or more properties that are different than the first graphical object," as recited by claim 24.

In Singh, the user is required to make parameter changes to a block within a graphical class as stated in Col. 5, lines 1-6: "The process 40 constructs a graphical class instance from the graphical class for use in a model. The process enables the user to make changes to a value of one or more parameters of a block within the graphical class instance. The process determines if the user wants to proceed with the changes." The Singh reference fails to disclose an automatic change in parameters as required by Applicants' claim 24. Thus Applicants respectfully submit that Singh does not disclose the "copy and morph operation" as recited by claim 24.

As such, Singh does not support a valid 35 U.S.C. §102(e) rejection of claim 24 since Singh does not disclose the features of claim 24. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 24 under 35 U.S.C. § 102(e).

Claims 25-34

Claims 25-34 depend from claim 24 and as such incorporate each and every element of claim 24. Claims 25-34 are therefore allowable for at least the reasons presented above with respect to claim 24. Applicants respectfully request the withdrawal of the rejections and the allowance of claims 25-34. Additional patentable features of claims 25, 26, and 30 are discussed below.

Applicants respectfully submit that claim 25 recites additional patentable features. Claim 25 recites "executing a copy and morph operation comprises creating a signal tap block for tapping the signal." The Examiner identified Fig. 5C and related text as disclosing this feature. (Office Action, p. 8, ¶ 4). However, Fig. 5C of Singh illustrates a screen display of the model window showing the placement of the selected block within the user's model. (Singh, Col. 6, lines 2-5). Singh discusses selecting a block in the library browser, dragging the block from the

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library browser and dropping the block in the model window. (Singh, Col. 5, lines 65 – Col. 6, line 1). Singh does not disclose that executing a copy and morph operation comprises creating a signal tap block for tapping the signal, as required by claim 25.

Claim 26 recites "the selected graphical object is a line representing a signal, and the step of executing a copy and morph operation comprises creating a signal tap block for tapping the signal." The Examiner asserts that Fig. 5C and related text of Singh discloses this feature. (Office Action, p. 8, ¶ 5). As argued above regarding claim 25, Fig. 5C of Singh illustrates a screen display of the model window showing the placement of the selected block within the user's model. Singh does not disclose that the selected graphical object is a line representing a signal. Furthermore, Singh does not disclose that executing a copy and morph operation comprises creating a signal tap block for tapping the signal, as required by claim 26.

Applicants also note that claim 30 recites additional patentable features. Claim 30 recites "one of said transformed graphical object and said selected graphical object is a bus creator block and the other of said transformed graphical object and said selected graphical object is a bus selector block." Claim 30 depends from claim 29, which recites a transformed graphical object being an inverse graphical object of the selected graphical object. The Examiner identified Fig. 2B and related text of Singh as disclosing this feature. As discussed above, Fig. 2B of Singh shows blocks available in the "sources" library. Singh discusses that the blocks in the library can include both the most basic building blocks, i.e., the graphical blocks, and more complex subsystem blocks made up of interconnected ones of the graphical blocks. However, Singh does not disclose "one of said transformed graphical object and said selected graphical object is a bus creator block and the other of said transformed graphical object and said selected graphical object is a bus selector block," as required by claim 30. Singh does not disclose bus creator blocks at all.

In view of the above comments, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 25-34 under 35 U.S.C. § 102(e).

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Claim 37

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Claim 37 recites "executing a morph operation on the selected graphical object to change one or more properties of the selected graphical object, thereby creating a transformed graphical object derived from the selected graphical object."

As discussed above, Singh does not disclose a transformed graphical object derived from the selected graphical object. The language identified by the Examiner as disclosing this feature refers to a user selecting a block from the library window and putting the block on the model window. (Office Action, p. 10, lines 10-12). The user selects the repeating sequence block and drags the block from the library browser and drops the block in the model window. (Singh, Col. 5, line 67 – Col.6, lines 1-2). Singh discusses forming a block diagram using the block elements of a library. Singh does not disclose executing a morph operation on the selected graphical object to change one or more properties of the selected graphical object, thereby creating a transformed graphical object derived form the selected graphical object, as required by claim 37.

As such, Singh does not support a valid 35 U.S.C. §102(e) rejection of claim 37 since Singh does not disclose the features of claim 37. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 37 under 35 U.S.C. § 102(e).

Claims 38-45

Claims 38-45 depend from claim 37 and, as such, incorporate each and every element of claim 37. Claims 38-45 are therefore allowable for the same reasons as claim 37. In view of the above comments regarding claim 37, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 38-45 under 35 U.S.C. § 102(e).

Claims 48-49

Claim 48 recites, among other things, "displaying to the user a plurality of transformation operations to be performed on the selected graphical object for creating a second graphical object from the selected graphical object." As discussed above in relation to claim 1, Singh does not disclose this limitation. Applicants kindly request the Examiner to reconsider and withdraw the rejection of claims 48-49 under U.S.C. § 102(e). Claim 49 depends from claim 48 and, as

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such, incorporates each and every element of claim 48, and is patentable over Singh for at least the same reasons as claim 48.

Claims 50 and 54   **BEST AVAILABLE COPY**

Claims 50 and 54 recite, among other things, "executing a copy and morph operation on the first graphical object to create a second graphical object derived from the first graphical object, wherein the second graphical object has one or more properties that are different than the first graphical object." As discussed above in relation to claim 24, Singh does not disclose this limitation. Applicants respectfully submit that claims 50 and 54 are patentable over Singh and kindly request the Examiner to reconsider and withdraw the rejection of claims 50 and 54 under 35 U.S.C. § 102(e).

Claims 51 and 55

Claims 51 and 55 recite, among other things, "executing a morph operation on the selected graphical object to change one or more properties of the selected graphical object, thereby creating a transformed graphical object based on the selected graphical object." As discussed above in relation to claim 37, Singh does not disclose this limitation. In view of the above comments regarding claim 37, Applicants respectfully submit that claims 51 and 55 are patentable over Singh and kindly request the Examiner to reconsider and withdraw the rejection of claims 51 and 55 under 35 U.S.C. § 102(e).

Claims 52-23

Claim 52 recites, among other things, "displaying a plurality of transformation operations to be performed on a graphical object after the user selects the graphical object." As discussed above in relation to claim 1, Singh does not disclose this limitation. Claim 53 depends from claim 52 and as such incorporates each and every element of claim 52. In view of the above comments regarding claim 1, Applicants respectfully submit that claims 52-53 are patentable over Singh and kindly request the Examiner to reconsider and withdraw the rejection of claims 52-53 under 35 U.S.C. § 102(e).

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V. Claim Rejections under 35 U.S.C. § 103(a)   BEST AVAILABLE COPY

Claims 35-36 and 46-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Singh (US Patent 6,868,526) in view of Johnson (US Patent 5,621,880). Applicants respectfully traverse this rejection.

Claims 35-36 depend from claim 24, and as such, incorporate each and every element of claim 24. Claim 24 recites "executing a copy and morph operation on the first graphical object to create a second graphical object derived from the first graphical object, wherein the second graphical object has one or more properties that are different than the first graphical object." Singh does not disclose or suggest this feature. Johnson, alone or in combination with Singh, fails at curing this shortcoming.

Johnson teaches providing automatic navigation in a multitasking windowing environment to a window, which contained a user specified search criteria at some time in history. (Col. 2, lines 31-34). The user may invoke by pressing a hot key from the keyboard, by selecting an icon by use of a mouse, or by another appropriate input invocation such as voice command activation. (Col. 7, lines 3-6). The service searches desktop sessions and objects until finding an occurrence that satisfies the criteria in historical data associated with the desktop sessions and objects. Upon finding the occurrence, the service automatically pops the window or full screen session having historical data containing the search string into focus. (Abstract).

Johnson teaches how to perform a search in a multitasking environment. Johnson further teaches entering commands using the hot keys and voice commands. However, Johnson does not teach executing a copy and morph operation on the first graphical object to create a second graphical object derived from the first graphical object, wherein the second graphical object has one or more properties that are different than the first graphical object, as required by claim 24.

As such, Singh, in view of Johnson, does not support a valid 35 U.S.C. §103(a) rejection of claims 35 and 36 since the combination of Singh and Johnson does not disclose the features of claims 35 and 36. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 35 and 36 under 35 U.S.C. § 103(a).

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Claims 46 and 47 are system claims that parallel claims 35 and 36. In view of above arguments regarding claims 35 and 36 Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 46 and 47 under 35 U.S.C. § 103(a).

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CONCLUSION

In view of the above comments, Applicants believe the pending application is in condition for allowance and urge the Examiner to pass the claims to allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact Applicants' attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-089. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

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Dated: February 22, 2007

Respectfully submitted,

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Attachments

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